OCT 17 2003

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/590,049
Filing Dat	06/08/2000
First Named Inventor	Kenneth J. Southwick
Group Art Unit	1764
Examiner Name	Basia Anna Ridley
Attorney Docket Number	106747.118

	ENCLOSURES (check all that apply)
I ┌── ┓	Assignment Papers (for an Application) Drawing(s) Licensing-related Papers Petition Petition Power of Attorney, Revocation Change of Correspondence Address Terminal Disclaimer CD, Number of CD(s) After Allowance Communication to Group Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please identify below): - Postcard Request for Refund CD, Number of CD(s) Remarks 1. Form PTO-1449 (one page)
SIGNATUR	RE OF APPLICANT, ATTORNEY, OR AGENT
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Signature	P. Laudy
Date Oct 7	7, 2003
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EE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

0 9 2003

TOTAL AMOUNT OF PAYMENT (\$) 180.00

Com	ling Date 06/08/2000			
Application Number	09/590,049			
Filing Date	06/08/2000			
First Nam d Inventor	Southwick			
Examiner Name	Basia Anna Ridley			
Art Unit	1764			
Attorney Docket No.	106747.118 DV HS 6 M - 1 / 1			

METHOD OF PAYMENT (check all that apply)					FEI	E CALCULATION (continued)	
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Deposit	Hale and Dorr LLP	1052		2052		Surcharge - late filing fee or oath Surcharge - late provisional filing fee or	
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	s authorized to: (check all that apply)	1053		1053		Non-English specification	
Charge fee	(s) indicated below Credit any overpayments			1812	•	For filing a request for ex parte reexamination	^{on}
✔ Charge any	additional fee(s) or any underpayment of fee(s)	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee	(s) indicated below, except for the filing fee	1805	1,840°	1805	1,840*	Requesting publication of SIR after	
to the above-id	entified deposit account.	┛				Examiner action	
	FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
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	Code (\$)		1,480	2254	740	Extension for reply within fourth month	<u> </u>
1001 770	2001 385 Utility filing fee		2,010	2255	1,005	Extension for reply within fifth month	
1002 340	2002 170 Design filing fee	1401	330	2401		Notice of Appeal	
1	2003 265 Plant filing fee	1402	330	2402		Filing a brief in support of an appeal	
1004 770	2004 385 Reissue filing fee	1403	290	2403		Request for oral hearing	
1005 160	2005 80 Provisional filing fee	1451	1,510	1451	•	Petition to institute a public use proceeding	
ļ . '	SUBTOTAL (1) (\$) 0.00	1452	110	2452	55	Petition to revive - unavoidable	
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Independent		1503	640	2503		Plant issue fee	
Claims Multiple Deper		╣ 1460	130	1460		Petitions to the Commissioner	
Large Entity	· · · · · · · · · · · · · · · · · · ·	၂ 1807	50	1807		Processing fee under 37 CFR 1.17(q)	100.00
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Code (\$) 1202 18	Code (\$)	8021	40	_8021	i 40	Recording each patent assignment per property (times number of properties)	
1201 86	2201 43 Independent claims in excess of 3	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290	2203 145 Multiple dependent claim, if not paid	1810	. 770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1204 86	2204 43 ** Reissue independent claims over original patent	1801	770	2801	385	` '"	
1205 18	2205 9 ** Reissue claims in excess of 20 and over original patent	1802		1802		Request for expedited examination of a design application	
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**or number	previously paid, if greater, For Reissues, see above	J *Red	uced by	Basic I	Filing F	ee Paid SUBTOTAL (3) (\$)	180.00

SUBMITTED BY

Name (Print/Type)

Daniel P. Gaudet

Registration No. (Attorney/Agent)

Signature

(Complete (if applicable))

48,584

Telephone 617-526-6025

Date

Oct 7, 2003

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ACDRES SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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OCT 17 2003

TC 1700

Group Art Unit: 1764

Examiner: Ridley, Basia Anna

Attorney Docket No.: 106747-118 DV US CN1

Application of: Kenneth J. Southwick

Application No.: 09/590,049

Filed: June 8, 2000

For: Collider Chamber Apparatus and

Method of Use of Same

CERTIFICATE OF MAILING (37 C.F.R. § 1.8 a)

I hereby certify that this correspondence is being deposited with the United States Postal Service under 37 CFR 1.8a and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 142 day of October, 2003.

By: Juan Boufal
Tina M. Dougal

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97-98, and M.P.E.P. §609, Applicant hereby encloses Form PTO-1449, which includes publications which have previously been cited in a prior patent application Serial No. 09/354,413 filed July 15, 1999, now issued U.S. Patent No. 6,110,432, and U.S. Serial No. 09/090,121 filed June 4, 1998, now abandoned, from which the above application claims priority under 35 U.S.C. §120. Therefore, pursuant to 37 C.F.R. § 1.98(d), no further copies of the previously cited art is enclosed.

It is respectfully requested that the information above be expressly considered and that the publications be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

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Serial No. 09/590,049 Southwick Page 2

As this paper is being filed after the issuance of a first Office Action on the merits, the undersigned hereby authorizes the required fee of \$180 to be deducted from Deposit Account No. 08-0219.

In the event a fee is due, the Commissioner is authorized to charge any fee deficiency or credit any overpayment to Deposit Account No. <u>08-0219</u>.

Respectfully submitted,

Daniel P. Gaudet

Registration No. 48,584 Attorney for Applicant

Jam 1 P. Saudet

Hale and Dorr LLP 60 State Street Boston, Massachusetts 02109 (617) 526-5138 (telephone) (617) 526-5000 (facsimile) OCT 0 9 2003

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 106747.118 DV US CN₁

Application No. 09/590,049

Inf rmation Disclosure Stat ment **by Applicant** (Use several sheets if necessary)

Applicant

Kenneth J. Southwick Filing Date

June 8, 2000

Group Art Unit 1764

(37 CFR §1.98(b))

Examiner Initial	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	2,965,362	12/1960	Flottman et al.	259	8	
	2,969,960	1/1961	Gurley, Jr.	259	7	
	3,285,702	11/1966	Lamb et al.	23	252	
	3,667,234	6/1972	De Lizasoain	61	1 R	
	3,922,871	12/1975	Bolesta	62	5	
	4,047,068	9/1977	Ress et al.	313	359	
	4,098,582	7/1978	Takeda	55	92	
	4,405,658	9/1983	Young	427	63	
	4,685,443	8/1987	McMurtry	126	247	
	4,685,534	8/1987	Burstein et al.	181	251	
	4,702,846	10/1987	Ryynanen	210	788	
	4,840,645	6/1989	Woodworth et al.	55	1	
	4,913,556	4/1990	Schroter et al.	366	305	
-	5,053,127	10/1991	Schoendorfer et al.	210	196	
	5088,831	2/1992	Reinhall	366	171	
	5,141,328	8/1992	Dilley	366	305	
	5,534,118	7/1996	McCutchen	202	205	
	5,538,630	7/1996	Burns	210	198.1	
	5,554,301	9/1996	Rippetoe et al.	210	748	
	5,571,975	11/1996	Smith, Jr. et al.	_ 73	862.16	
	5,676,801	10/1997	El-Sayed	202	182	
	5,860,605	1/1999	Van Der Zanden	24	27	

Examiner	Document	Publication	Country or			T	Translation	
Initial	Number	Date	Patent Office	Class	Subclass	Yes	No	
						l i		

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.